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ABSTRACT

A study was conducted to establish a baseline profile of business and education linkage activities in Lake County, Illinois. Data were collected through a survey questionnaire sent to 242 public and private K-12 schools in Lake County. Two rounds of mailings resulted in the return of 109 usable forms, or 45 percent of the population. Telephone interviews were conducted with 41 percent of nonrespondents and on-site interviews were conducted with personnel in 31 schools. The information gathered provides a snapshot of the current linkage activities occurring in the county, the planned growth of those activities, and continued needs of schools for community support. It also includes examples of a wide range of established efforts that are perceived as improving the educational experience of youth. Four common themes emerged as reasons for establishing linkages with business: need, relevance for learning, promoting a positive image of the schools, and school responsibility for preparing the work force. Approximately 68 percent of the schools had some form of linkage. At the elementary level, the most prevalent forms of linkages were career speakers, materials donations, monetary awards and donations, and facility tours. The middle school respondents also indicated that career speakers were the most often used activity, followed by materials donations and facility tours. The greatest number of types of linkage activities were reported by high schools, with facility tours being the most common form of activity. This activity was followed by career speakers, job fairs, mentors, equipment donations, job shadowing, summer employment for instructors, and cooperative education. Overall, the schools indicated a 15 percent increase in the planned use of the various types of linkage activities for the 1994-95 school year, with the greatest efforts being made by the high schools. Schools noted that they would like to hear success stories from other schools, arranged through a consortium, and that they would like help in matching up schools and businesses. The study identified several innovative programs and activities occurring in Lake County schools. (The report includes three appendixes listing interview participants, 45 organizational resources, and 53 books, periodicals, and materials.) (KC)

ED 377 408

BUSINESS AND EDUCATION LINKAGE ACTIVITIES

Lake County, Illinois

Prepared for
The Lake County Economic Development Commission
Education and Labor Availability Committee

U.S. DEPARTMENT OF EDUCATION
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January, 1995

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EXECUTIVE SUMMARY

The purpose of this report is to establish a baseline profile of business and education linkage activities in Lake County, Illinois. Linkages are connections between schools and community resources that accomplish educational objectives. Linkages may be well documented, planned, and evaluated activities such as adopt-a-school and other formal partnerships, or they may be the result of an occasional one-time donation of surplus materials.

Supporting data was collected through a survey questionnaire sent to 242 public and private K-12 schools in Lake County. Two rounds of mailings resulted in the return of 109 usable forms or 45% of the population. A non-respondent telephone poll was conducted with 55 of the 133 schools who did not return the questionnaires, representing 41% of the non-respondent group. On-site, structured, follow-up interviews were conducted with personnel from 31 schools identified by their level of involvement reported on the returned surveys. Questionnaire and interview data was collected during the April to June 1994 time frame.

The information provides a snapshot of the current linkage activities occurring in the county, the planned growth of those activities, and continuing needs of schools for community support. It also includes examples of a wide range of established efforts that are perceived as improving the educational experience of our youth. Additionally, regional, state, and national resources and publications are included as a reference for further discussion, planning, implementation, and evaluation of business, community, and school linkages.

The reasons for establishing activities in Lake County are varied and reflect the specific needs and environments of each school. Four common themes emerged from the interviews conducted with Lake County educators: (1) need (financial and otherwise) is often a primary motivation, (2) linkages can provide increased relevance for learning, (3) business involvement can reduce negative impressions of the schools, and (4) schools recognize that they have a responsibility for preparing students for the workforce.

Linkage activities can be developed as the result of formal district level planning, business initiatives, community group programs, or simply as extensions of parents and teachers personal contacts. More often than not, the responsibility for developing linkages lies with the school and its immediate interest group. Building level administrators, teachers, and parents were consistently identified as the key sources of activity.

Approximately 68% of all schools, public and private, are estimated to have had some form of business linkage activity during the 1993-94 school year. A consistent trend is an increase in activities at higher grade levels. Approximately 56% of elementary schools had some form of linkage, 79% of middle schools, and 90% of high schools.

The methods of linkage development reported by the interview subjects provide a variety of possibilities for other schools to emulate. They also reflect the experience and commitment of the various schools in creating a higher level of community involvement in education. According to the U.S. Department of Education, most partnership activities start through trial and error. The survey and interview data reveals that most linkages are also the result of a personal contact. Although some activities are brokered by districts, or in response to grants that involve only limited correspondence, generally a personal relationship evolves between a school and business representative.

The Survey included a list of twenty types of linkage activities. Respondents were asked to indicate their current and planned activities. At the elementary level the most prevalent forms of linkages were: (1) career speakers, 52% of the responding schools, (2) materials donations, 37% of the schools, (3) monetary awards and donations, 31%, and (4) facility tours, 28% of the responding elementary schools. The middle school respondents also indicated that career speakers were the most often used activity, with 58% of the schools indicating that type of linkage. Materials donations and facility tours were reported activities at 42% of the middle schools, and monetary awards were indicated by 33%. The greatest number of types of linkage activities were reported by the high schools. Facility tours were the most common with 68% of the high schools indicating that activity. Another common form was career speakers with a 64% participation rate. Six different activities were reported by 36% of the high schools: (1) job/career fairs, (2) business/industry mentorships, (3) equipment donations, (4) job shadowing, (5) summer employment for instructors, and (6) cooperative education.

Overall the schools indicated a 15% increase in the planned use of the various types of linkage activities for the 1994-95 school year. During the follow-up interviews almost all of the schools said that there was an increasing trend in linkage activities at their schools, and that they expected it to continue.

The efforts aimed at promoting new linkages mirror the increased activity at higher grade levels found throughout the report. Less than 25% of the elementary schools reported using any method to promote linkages. The most often cited (22%) were teacher/parent group initiatives (consistent with the primary method of development) and formally recognizing business involvement. Middle schools had slightly more activity, but still the two most often used, career days and Teacher/parent groups, were reported by less than one-third of the schools. High schools had considerably higher levels of activity with designated staff member the most often used. All three grade-levels anticipate important increases in promotional activities. The planned increase of promotional activities is 68% at the elementary level. The middle schools reported an anticipated increase of 57%, and the high schools indicated an increase of 39%. This trend is consistent with the lower initial levels of activity at elementary and middle schools compared to high schools. The large increase in promotional activities would appear to also be consistent with a general increase in interest in linkage activities reported at all three grade levels.

During the interviews educators were asked to comment on what assistance they might use from the county level, including such groups and institutions as the Regional Superintendent of Schools, College of Lake County, Lake County Business Industry Education Consortium, and Lake County Learns. Two common areas were identified; (1) increased sharing of "how to" information and regional success stories, and (2) the need for a centralized brokering entity to help make matches and notify interested parties of various opportunities.

The levels of activity in business and education linkages represent important efforts by schools and business to address problems and create opportunities. This study identified several innovative programs and activities occurring in county schools. Generally, Lake County schools have a high level of interest in developing new linkages and increasing the communication between business and education to address common needs. The needs addressed by business and education linkages, or partnerships, cut across the entire spectrum of socio-economic status, school funding, and student diversity. They create opportunities to reinforce the value of core subjects, relating school to life and work. They enable students to set goals and build self-esteem. They broaden the understanding of the community at large, and the business sector in particular, to the challenges and successes of our schools. They assist in the critical endeavor of preparing our youth for the future and our society and nation for meeting the continued challenge of a global economy and changing individual and collective relationship to learning and work.

INTRODUCTION

The purpose of this report is to establish a baseline profile of business and education linkage activities in Lake County, Illinois. Linkages are connections between schools and community resources that accomplish educational objectives. Linkages may be well documented, planned, and evaluated activities such as adopt-a-school and other formal partnerships, or they may be the result of an occasional one-time donation of surplus materials. The objectives of linkage activities are as varied as the needs and resources of the communities, schools, and businesses who participate. There is no one way to plan, organize, implement, or evaluate these activities. There is not even a single philosophy of support for these activities or agreement on their role in the educational endeavor. They are, however, a growing phenomenon in American education, one that according to a National Education Association handbook on partnering, "is not going away."

Lake County, Illinois, represents a microcosm of the challenges and successes of American education. Some of the most affluent districts in the state are located just a few miles away from some of the most financially challenged. The students in public and private elementary and secondary schools in the county represent the larger diversity of the nation and the demographics of the emerging workforce of the next century.

The needs addressed by business and education linkages, or partnerships, cut across the entire spectrum of socio-economic status, school funding, and student diversity. They create opportunities to reinforce the value of core subjects, relating school to life and work. They enable students to set goals and build self-esteem. They broaden the understanding of the community at large, and the business sector in particular, to the challenges and successes of our schools. They assist in the critical endeavor of preparing our youth for the future and our society and nation for meeting the continued challenge of a global economy and changing individual and collective relationship to learning and work.

This report includes the results of a survey completed by 109 schools and over 30 follow-up interviews with educators throughout Lake County. The information provides a snapshot of the current linkage activities occurring in the county, the planned growth of those activities, and continuing needs of schools for community support. It also includes examples of a wide range of established efforts that are perceived as improving the educational experience of our youth. While the examples are only a portion of the total overall linkage activity in the county, they do represent an important range and depth of activities and commitment. These examples of successful ventures within our immediate area can provide the impetus and assurance for fledgling efforts.

This report also contains advice, and needs for assistance, from educators in Lake County. Additionally, regional, state, and national resources and publications are included as a reference for further discussion, planning, implementation, and evaluation of business, community, and school linkages.

THE STUDY

This report is based on a study conducted for the Education and Labor Availability Committee of the Lake County Economic Development Commission. Supporting data was collected through a survey questionnaire sent to 242 public and private K-12 schools in Lake County. Two rounds of mailings resulted in the return of 109 usable forms or 45% of the population. A non-respondent telephone poll was conducted with 55 of the 133 schools who did not return the questionnaires, representing 41% of the non-respondent group. On-site, structured, follow-up interviews were conducted with personnel from 31 schools identified by their level of involvement reported on the returned surveys. Questionnaire and interview data was collected during the April to June 1994 time frame.

Instrumentation

Survey Questionnaire. The questionnaire instrument contained three sections; (1) linkage activities at your school, (2) developing business and education partnerships, and (3) staff development for business/education linkages. An expanded checklist was the primary response format for all three areas. The first area, linkage activities, included three sub-questions: (1) approximate overall number of businesses involved in the current school year, (2) a seven item list with additional open ended responses to collect how linkages are developed by each school, and (3) a comprehensive linkage status grid based on twenty types of business and education linkages across five items related to current and planned use. The status grid also included a space for the name and phone number of a staff person who could provide more detail. The second area, developing partnerships, contained a grid of sixteen potential promotional activities across three response categories each. These questions were used to determine the current and planned use of promotional methods. A final item in the second area collected the name and phone number of a staff person who could share an interesting or unusual method for promoting linkages. The third element of the questionnaire, staff development, was also an expanded checklist. This grid included 13 topics and 3 open ended responses linked to 6 categories of current and planned staff development related to partnerships/linkages.

Interviews. The follow-up interviews were conducted at the schools with individuals identified in the questionnaires as contacts. Generally, these individuals were building level administrators (principals), although in a few instances guidance personnel, department heads, or district staff had been tasked with completing the surveys. The completed surveys served as a primary guide for the discussions. The subjects were asked to amplify their earlier comments, clarify where needed, and provide examples of each activity they indicated as currently taking place at their school. Eight additional questions were asked concerning the importance, motivation, implementation, evaluation, and administration of linkage activities. Interviews were tape recorded and varied from approximately 30 to 90 minutes.

Non-Respondent Poll. A random telephone poll was conducted with schools who did not return the survey. The purpose of this inquiry was to determine, to some degree, the generalizability of the data, and to enable an estimate of overall participation. Non-respondents were asked to answer the first question on the survey, "What is the approximate number of business/industry linkages at your school this year?" They were also provided with a definition of linkage activities from the instructions section of the survey.

Population and Sample Characteristics

Table 1 includes the population and sample characteristics of the 242, K-12 public and private schools included in the study. The response rates are further defined by the grade levels of the schools. In Lake County considerable differences exist between districts in grade level groupings. The three levels (elementary, middle school, and high school) provide a measure of definition and discrimination based on grade levels. Elementary schools, in this study, were defined as those that did not include grades beyond sixth grade. Middle schools were defined as those schools that did not include grades beyond grade nine. High schools were defined as those schools that included grades beyond grade nine. This definition scheme created categories of schools that were not mutually exclusive. For example, a private K-8 school would be included in the middle school category even though it included all of the elementary grades. Since aggregate data was reported this scheme assumed that if there was an effect based on grade level, then it would be consistently reported as a portion of the school's overall activity.

Response Rate. The combined response rate for both public and private schools was 109 of 242, or 45%. The public school response rate (47%) was higher than the private school's (39%), and the high school rate was higher than other grade levels. Generally, response rates were good for all categories except private elementary, with only 3 schools responding for a rate of 14%. The public schools who returned surveys represented 37 of 46 school districts included in the population. This represented some degree of participation by 80% of the public K-12 school districts in Lake County.

Table 1

Population And Sample Characteristics (Number Of Schools)

	PUBLIC			PRIVATE		
	Population Total	Sample Size	Return Rate	Population Total	Sample Size	Return Rate
Elementary	113	51	45%	22	3	14%
Middle School	46	18	39%	31	15	48%
High School	22	16	73%	8	6	75%
TOTALS	181	85	47%	61	24	39%

Non-Respondent Characteristics. In order to determine the fidelity of the sample characteristics to the larger population of interest it was necessary to conduct a follow-up with non-respondents. This was particularly appropriate in the case of private elementary schools where the initial response was low. Non-respondents were contacted randomly by telephone generating a pool of additional responses representing 41% of the schools who did not return surveys (55 of 133). Table 2 lists the number of additional telephone contacts at each grade level, the response rate within that group, and the final overall total contact; a combination of the survey sample and follow-up group. The non-respondents were asked to provide the approximate number of businesses with whom their school had linkages during the school year. This question provided a key discriminator between those schools who actively participated in linkages, and those who did not. In order to estimate an approximate overall level of participation in linkages it was necessary to compare the participation rates between the original sample and the non-respondents at each grade level.

The total contact represents approximately 68% of the population of K-12 schools in the county. The final total response for every grade level category was more than 60% of the schools in each group. The additional telephone sample also increased the overall representation of public school districts to 89% of the K-12 districts in the county.

Data Analysis

Survey data was analyzed using descriptive statistics. Analysis included the three grade levels and focused on current and planned activities to reveal not only the current linkages but also the anticipated trends. Interview data was thematically analyzed for each of the eight questions not included in the original survey. The interviews were also the source of examples of local practice for the various linkages. These examples were not particularly demonstrative of a general level of activity but instead highlight potential practices. Non-respondent data was compiled to generate grade level means for participation as a source of comparison with sample data.

Table 2

Non-Respondent Sample Characteristics and Total Contact Rate

	PUBLIC			PRIVATE		
	Non-Respondent Sample	Return Rate	Total Contact Rate	Non-Respondent Sample	Return Rate	Total Contact Rate
Elementary	24	39%	66%	11	58%	64%
Middle School	10	36%	61%	6	38%	68%
High School	3	50%	86%	1	50%	88%
TOTALS	37	39%	67%	18	49%	69%

LEVELS OF PARTICIPATION

In order to determine the general extent of business and school activities, respondents were asked, "What is the approximate number of business/industry linkages at your school this year?" The question was limited by the statement, "The overall number of businesses only, not each individual activity." Responses ranged from none to 200. Of the 109 schools which returned the survey instruments, 81% indicated that they had participated with at least one business during the 1993-94 school year. Table 3 provides the levels of general (at least one business) linkage activity for the sample and the follow-up telephone poll groups. The primary reason for conducting the follow-up poll was to determine if the respondents and non-respondents represented different levels of participation. The non-respondent follow-up group's reported participation rate was 25% less than the survey sample. Several of those contacted by phone stated that they had not completed the surveys because they did not participate with businesses in linkage activities or they felt that linkages were not appropriate at their grade levels.

Total Estimated Participation

The total level of participation in business linkages by schools in Lake County is estimated in the last column of Table 3. A consistent trend is an increase in activities at higher grade levels. Approximately 68% of all schools, public and private, are estimated to have had some form of business linkage activity during the 1993-94 school year. The estimates were derived from the sample and follow-up rates using a conservative estimate for each remaining pool of non-contacted schools.

Table 3

Overall Participation (Linkage With At Least One Business)

	Sample Group	Non-Respondent Poll Group	Estimated Total
Elementary	41 (76%)	15 (43%)	76 (56%)
Middle Schools	26 (79%)	13 (81%)	61 (79%)
High Schools	21 (95%)	3 (75%)	27 (90%)
TOTALS	88 (81%)	31 (56%)	164 (68%)

Why do Schools Participate in Linkages?

The U.S. Department of Education's report, *A Guide to Developing Educational Partnerships*, states that, "Partnerships should be developed if there is a shared concern about a real problem that can best be addressed by organizations from different sectors working together." The National Education Association's handbook for educators, *Bring Business and Community Resources Into Your Classroom*, lists 63 potential objectives for school and business collaboration. The reasons for establishing activities in Lake County are varied and reflect the specific needs and environments of each school, public and private, affluent and austere, urban and rural, and elementary through high school. Four common themes emerged from the interviews conducted with Lake County educators: (1) need is a primary motivation, (2) linkages can provide relevance for learning, (3) business involvement can reduce negative impressions of the schools, and (4) schools have a responsibility for preparing students for the workforce. The following statements from the interviews represent some of the reasons Lake County schools are participating in linkages:

"The student's education does not end with these four walls...it goes beyond this, it's on the athletic field, it's doing volunteer work for the elderly home, it's going on band concerts, it's performing in a play, and it's going to a corporation to see how the real world operates."

"..material, money, of course are important. We never seem to have enough, but I think (the most important element is) the idea sharing and looking at what businesses need from students, so that we can better prepare students."

"Gives (the students) a perspective of what education is about, they really don't understand why they are here, they don't understand that every day they are preparing for the future."

"Both sides are going to be winners, people who come into your school will have a more positive outlook about your school and kids will see the relationship between school and work."

"Like most school districts, we are experiencing financial problems, one of the ways that we have been able to supplement tax money is through businesses, (but it is) not only money...the community becomes involved with the school. It's fun too. The kids find that there is a relationship between what they do and the world of work."

"...for some mostly financial, but I am equally concerned about perceptions, we have 80% of our students reading above the national average and I really resent the climate that schools are failing."

"It makes local businesses more knowledgeable about what is going on in the school and they also need to understand that what happens here has a direct impact on what happens to them...it is incumbent upon both sides to work together so that the end result is a citizen who is able to go out into the workforce and not only be a good citizen, but a good employee for the business as well."

"Schools wanting to make curriculum alive for kids. For schools with high achieving students, (the business activity) keeps the students involved: everything from providing financial assistance to making sure that the gifted kids continue to have motivation, and an opportunity to expand their horizons."

"It is more and more important that schools get out of the confines of the schoolground and expand, but I think it's also important that businesses enter those confines."

"(It is) simply another vehicle for kids to learn, to attach meaning to what they do, and discover about the world around them, more than money or donations."

"(It) makes students more aware of what's out there in the real world, (to) be able to have the ability to change and be flexible, understand that they will have to be continually trained and keep improving, to see that it's a lifetime process...people who are outside have more of an impact."

"(Students) learn something new and possibly find another avenue to learn (the) content and the opportunity to further study...more times than not the outside person learns too."

"...helps teachers see the relationships also. Many times they come from education into the schools and its beneficial for them also."

"We're preparing the next generation for the workforce. We need to know what skills are required, what employers are looking for. We need to be realistic that not all of our kids are college bound and we need to meet their needs as well. We can all learn from each other. We are embracing the TQM (Total Quality Management) elements looking at kids and parents as our customers and its helping us better focus."

"Areas must be educationally sound to promote growth and business."

"It gives the kids the idea that there is life after school and you don't have to be a doctor, you don't have to be a lawyer. If you are, that's great. If you can achieve those, if you can obtain the grades, fine. But it also shows that even Pizza Hut can offer a lot. They can work at Pizza Hut. They can aspire to be the manager of Pizza Hut. Communities are not just built of large corporations; small businesses are important too. (The relationships) build self-esteem. A company shows that it is interested in trying to build the students."

"All schools need to expand their horizons. All schools are community schools, and the more you involve the community the better."

"The types of things that we want to do are going to help us build a stronger base. Our kids seem to come in with less and less home experience. Any opportunities that we can provide, to get those kids up to speed, can help."

"It's good for students to see a reality base. Often they think that school is an end in itself and the business connection brings reality to the school. It makes what we do more meaningful."

"Making sure that we're sending people who are going to be able to not only academically handle the things that are going on around them but also be able to participate and have choices."

"Kids get a sense of awareness of what education is about: 'Why am I learning these skills? Why am I learning wordprocessing skills?' They see the application of skills they are learning."

"(It is) absolutely critical that industries and businesses tell students how important their educations are. Developing a common language is the most important thing. The second most important is that area businesses who have the resources help schools with technology so that the students are trained on equipment that will be used in the workplace."

"I think that training the kids to get a job is important. In any school you will find people who think that all you need to know is the subject matter but you need to tie that into work."

"Teachers need to work hard at linking their subject areas to what's needed in a job. That's what kids need to know."

"We want our customers to be satisfied. We want to deliver a good product. We are not just drawing salaries here, we are trying to put out a good product. We need to develop community for all of us."

"We in public schools are facing a climate nationally in which schools aren't looked at as doing a very good job. Whereas I won't deny that there are schools that aren't doing a very good job, I would say that those of us in schools that feel we are doing a really good job resent that, and we need to do something about that...to show people what a fine job the staffs are doing and the outcomes the kids are engaged in. We need visibility...not just with the parents in your community because the parents are often a minority, and everybody is contributing financially including businesses. You also look at the press in the last five to ten years, you hear CEO's and corporate people describing the abilities and knowledge and skills that their potential or newly hired workers have or don't have. Being in a primary building, there is a phenomenon: the colleges say that the high schools aren't doing it, and the high schools say that the middle schools aren't doing it, and the middle schools say it's the intermediates, and the intermediate say it's the primaries, and I can only blame the parents. So instead of continuing to pass the buck, and being on the bottom end of the feeding chain, I think that it is incumbent to work with people to change the perceptions, instead of just passing the buck, let's work together."

"Schools cannot work being isolated in these times, not only the kids but the teachers. Now just for a vital community it's necessary for the schools and businesses to work together."

"The whole focus of schools has changed, (we) can't do the same kinds of activities. Businesses gripe about workers. Although this is an elementary program it is still our problem. We have to be thinking about other ways to solve problems; (we) need to know what businesses need."

"Without them (businesses) it would minimize many of the opportunities for the youngsters. We could not provide the opportunities for students without the support of business and other organizations. Without businesses here we could not conduct business."

"Once you get the business people in they go beyond the abstract, the students realize that it's important to be on time everyday, to fully apply themselves. Students can see why it's important: they should come to the realization that they will have to compete and it's essential for them to have all of the skills possible."

"You have to show students that there is a connection between algebra, speech and English, and what you need to know on the job. The basic values of work, being on time, dressing appropriately, directly relates to school. Somehow it doesn't get communicated or reinforced at home. It's not the same when we tell them. It has more emphasis when its someone from outside like Abbott, Baxter etc. It has more credibility."

DEVELOPING LINKAGES

Linkage activities can be developed as the result of formal district level planning, business initiatives, community group programs, or simply as extensions of parents and teachers personal contacts. Table 4 displays the rank order of common methods of linkage development reported by survey respondents. More often than not, the responsibility for developing linkages lies with the school and its immediate interest group. Building level administrators, teachers, and parents were consistently identified as the key sources of activity. The ranking of parental involvement in Table 4 provides one of the few observable differences between public and private schools in the survey. It appears that the parental focus wanes in public schools as students progress through the grade levels, with greater emphasis for creating linkages being transferred to school staff. Parents are the primary developer for all grade level groups, however, in private schools. The trend in public schools may also reflect the programmatic interest in workforce preparation that occurs at the higher grades as activities become parts of the regular curriculum. It is interesting to note that district level initiatives generally do not appear to play a major role. The responses to the surveys, and follow-up interviews, clearly indicate that the development of linkages is a building level activity involving the immediate stakeholders; parents, teachers, and principals.

Table 4

How Are Linkages Developed (Rank Order)

	PUBLIC			PRIVATE		
Method (Rank)	Elementary Schools	Middle Schools	High Schools	Elementary Schools	Middle Schools	High Schools
Parents	1	3	5	1	1	1
School Staff (Personal)	2	1	1	-	2	4
School Initiated	3	2	2	-	3	2
Business Initiated	4	4	3	-	5	3
Community Groups	5	5	3	-	4	5
District Initiated	6	6	4	-	-	-

Development Methods

The methods of linkage development reported by the interview subjects provide a variety of possibilities for other schools to emulate. They also reflect the experience and commitment of the various schools in creating a higher level of community involvement in education. According to the U.S. Department of Education, most partnership activities start through trial and error. The survey and interview data reveals that most linkages are also the result of a personal contact. Although some activities are brokered by districts, or in response to grants that involve only limited correspondence, generally a personal relationship evolves between a school and business representative. Often these are existing relationships based on parents employment, teachers spouses, or administrators efforts.

Parents. Several schools actively recruit parental involvement. Parents are sent surveys and asked to speak about their jobs to classes or participate in career days. Parent organizations (PTO/PTA) also contribute to the development effort through recruiting speakers and donations. More than one school reported receiving a grant from a parent's employer as part of a corporate foundation or special company initiative. Through parent's connections schools have received surplus materials, office furniture, a visit from an astronaut, scientific demonstrations, and facility tours. Approaching parents as partners can create linkages for experienced school personnel, but this method is particularly helpful for schools embarking on initial efforts. The administration of these efforts can be accomplished by principals and staff, teachers, or the parents themselves. An example of effective parental involvement and management is the Mechanics Grove school Partners in Education, or PIE group. This parent resource is separate from the PTA/PTO with a specific focus on parental partnering. Close to 100 parents (20%) are involved. Not all of the members are school parents and the program plans on expanding to include area senior citizens. PIE is an umbrella group, it provides helpers in the classroom, a speakers bureau, daily volunteers, a publishing group, and is completely administered by the parents. Volunteers are provided training by school staff and there have been few instances where any administrative intervention has been required.

School Staff. The personal contacts of school staff were also often reported as means of developing linkages. One educator developed a shadowing program based on friends who worked for major area employers. Another school emphasized the importance of teacher's spouses as potential speakers and partners. School staff contacts can be further developed by active participation in community groups particularly those which attract business persons. School personnel may belong to service clubs which can provide programs, funding, or guest speakers. The principal at one school was the president of the chamber of commerce and has been actively involved in the Exchange and Rotary Clubs.

School Initiated. Many of the building level administrators actively attempt to develop linkages. However, they often said that they needed more time, assistance, or greater emphasis from districts and the state to be completely successful. Some expressed concerns about leaving the building to attend meetings or visit businesses while school was in session. One survey respondent included a comment that although business linkages sounded like a good idea it is not on the IGAP (State goal assessment tests). The need for personal contact was also emphasized by the principals and staff members who were interviewed. One principal reported that a mailing to area businesses resulted in, "...a very minimal response." The principal at another school reported a very good response from local businesses that he visited to solicit incentives for student attendance and performance. An elementary principal reported a growing relationship with a photography business that is strengthened by his weekly visits to drop off the donated film for processing.

School personnel have also visited other districts, regionally and nationally, to learn more about partnering. Principals have also formed project teams of teachers to assist in the planning for linkage efforts. Finding the time to pursue linkage activities was consistently reported as the most difficult part of the process. One school that has addressed this issue with great success is Mundelein High School. Toni Rogan, the Community Resources Director, serves as a liaison to the business community and manages the schools partnership program. This was the only example, revealed by the study, of a dedicated staff person for linkage and partnership development at the building level (Mundelein High School is also a single school district). Although some district level personnel may be tasked with partnership development, they serve multiple schools and generally have additional primary duties.

Business Initiated. The examples of business initiated linkages ranged from local to national programs and small businesses to major corporations. They also included targeted programs, broadly available activities, and community or even building-specific efforts. While some efforts included an element of reciprocity, most did not. Examples of linkages based on a form of school contribution included a car dealership which provided computer equipment to a school based on the number of parents who test drove cars in a promotion, a marketing analyst who provided incentives and examples for instruction in return for participation in a candy study, Jewel Foods' register receipt incentive program, and the Campbell's Soup labels for products program. Many businesses, from nationwide franchises to the small locally owned, contribute throughout the area in incentive programs. These programs may encourage consumer loyalty or persuade a parent or student to buy a soft drink along with the free fries, but they generally do not require any kind of purchase or return. One example of a broadly used incentive program is the ten year old nationwide Pizza Hut *Book It* reading incentive program. Some examples of programs aimed at broad educational enhancement include the formal partnerships initiated by the Naval Training Center at Great Lakes and the Choices program sponsored by Abbott Laboratories. According to the Navy Personal Excellence Partnership Guidebook, the Personal Excellence Partnership Program, "is a collaborative effort designed to assist America's youth, preschool through 12th grade, to become productive members of our nation's workforce and positive, contributing citizens within their communities and the larger society."

Community Groups. In Lake County there are two community groups with missions specifically devoted to partnering and education. The Lake County Business Industry Education Consortium's mission is, "To enhance the communication and to facilitate alliances between business, industry, government and educational institutions to provide resources focused on improving career awareness and skills to meet society's changing needs for an educated and productive citizenship for the twenty-first century." Several schools belong to the Consortium, which was honored by the State of Illinois for its innovative programs. Several schools participate in the space simulation project sponsored by the consortium as well as attend meetings and satellite downlinks of national teleconferences on education. Lake County Learns is, "A voluntary partnership between business, education, human services and community. It works through a unique collaboration to identify needs and develop solutions that enhance education for all individuals in our community and promotes life-long learning as a family and community priority." Lake County Learns sponsors *The Learning Connection* which is a county-wide activity held during American Education Week to promote learning and encourage community involvement in schools. Both of these organizations are responding to community needs with on-going agendas for support and enhancement of education.

Other community-based groups were identified in the surveys or interviews as supporting linkages. The Boy Scouts of America sponsors the Exploring program. In Lake County, Explorer Posts provide a strong

career awareness program in areas such as law enforcement and computer science. Additionally, the program sponsors career interest inventories in area high schools and has a career speakers program. The Girl Scout Council supports the Women in Science initiative aimed at increasing awareness and participation of women in science-based careers. The Private Industry Council of Lake County provides summer employment programs for qualified youth. The Museum of Science and Industry in Chicago provided technical assistance to one high school science-based program. One of the most often mentioned programs in the interviews was Junior Achievement. Many schools participate with programs that are offered throughout the county at all grade levels. Several other groups were mentioned as supporting schools including service groups, governmental agencies, and church groups. One of the most common types of early exposure of students to careers, and widespread forms of linkage activity, are the programs presented by police and fire protection agencies in schools.

District Initiatives. While many schools reported district level programs including foundations and designated partnership staff persons, this form of linkage development was not identified as a major source county-wide. There appeared to be a greater district presence in more urban or financially challenged districts. The support of district Superintendents and other staff was included by most schools as a necessary requirement for program development. One elementary school Principal reported that although a district level partner had donated several thousand dollars to the school, having never met a representative of the company, it did not feel like a partnership. District level development activities included efforts by designated staff persons to generate partnerships, idea sharing among schools, planning initiatives, and district-wide recognition events. Several schools mentioned staff development opportunities, equipment and material brokering, and other support available through the Educational Service Center and the Regional Superintendent of Schools.

Development Strategies

In the U.S. Department of Education, Office of Educational Research report, *A Guide to Developing Educational Partnerships*, by Naida C. Tushnet of the Southwest Regional Laboratory, the author concludes that based on the research and evaluation efforts related to OERI funded partnerships one major conclusion can be drawn, "There is no single way to ensure successful partnership development." While it does appear that most activities are developed through trial and error, there are some common themes and strategies apparent in the data in this study that can benefit other schools interested in pursuing linkage activities. Although not specifically mentioned by any of the interview subjects it appeared that an underlying prerequisite was a willingness on the part of the building level administrator to devote the time and energy necessary to develop and support linkage programs. While it was reported that it is necessary to have the support of the district Superintendent, given the local nature of most activities, the building level appears to be the crucial element. There were also important differences observed between schools within the same district that would lend additional support to this premise. The focus on local resources was also common among the schools with more mature programs. Surveying parents and increasing their involvement is an important step. In addition to talking to students about their jobs parents can share other talents including subject matter expertise and management skills. Parents are also a conduit to their employers and can provide a link to foundation grants, excess materials, and corporate educational initiatives. The contacts of teachers and staff should also be included to enlarge the school community's linkage base. Teachers and parents can also assist administrators with developing, managing, and integrating initiatives into the curriculum. Another positive strategy is to learn and share from other schools, districts, businesses, and published sources. The next section of this report includes comments provided by the educators interviewed for this study as advice for schools interested in linkages activities.

Advice From Area Educators

"Start with one thing, right around you locally. Talk to the manager of the McDonald's right around you. Go to local small business and start from there. Go in person, make an appointment with the manager."

"Got to go face to face. You can't write letters and make phone calls. You need to visit one-on-one if you want to have a tie. Get to know them personally. Explain where you are and where you want to be. You need to get out and meet people personally."

"I believe that it would be beneficial to have a marketing team that represents the varied interests in the building."

"Talk to people, get involved with a base that you know, getting ideas, being able to take no and not letting that slow you down."

"Begin with hospitals, fire departments, businesses that are in their locality, certainly recommend Junior Achievement."

"Go out and bring the business people in and brainstorm and nothing can be excluded. Look at all of the options and then talk about the consequences and what can be done. We tend to focus too much on the constraints of what we have, to determine what we can do."

"Don't wait for them to come to you. Make the initial calls. You will need to pursue it on your own. You have to move slowly. Has to be very legitimate, ethical."

"First go through the parents. They have a vested interest right away. Set what you are looking for. Know what their companies do. We belong to the chamber of commerce, twice a year they allow the school to stuff materials in the chamber mailings."

"Take the time you need to make it valuable, if you think it is important take the time to pursue it. Eventually you can do it."

"All teachers and staff have business cards."

"First set down and lay out what types of things you need. Be prepared, define what it is you are looking for, what types of support and to what degree."

"Call me and see how I did it. I wish there was an organized way to tell you how to do it. It's all a sense of networking, it's a give and take thing."

"Invite them in to see what it is that we do. I think that high schools are much more adept at developing better relationships with businesses because the end of the road for them is easy to see. A kid enters high school and in four short years he's out and in the workforce and even during high school he's in the workforce a lot of times. We don't have that here in a K-8 district, so I think its a little bit harder for us, as an elementary district, to see that we do have an impact as well and we need to be a little more cognizant of that. I think that we need to work a little harder at developing stronger relationships with businesses if by nothing else by just going out into the community, offering different things in the community. We are making an effort through our PTO organizations, who are our ambassadors, letting everyone know what we are doing."

"Talk to other districts first to find out what mistakes they made. You learn from your mistakes, have to understand where your failures are, it's important to communicate that these are the things that could go wrong. What didn't work as well as what worked. Also describe the community. It may only work in a like community."

"When you set up partnerships there must be support from the top, CEO down, and Superintendent down. Its OK to start small. You don't have to have grandiose plans. You don't always have to have an exact idea. For districts that have more than one school, the director serves as the liaison but once it's set up the school should work with the partner directly."

"Don't be isolated, realize that there are many opportunities. Be open. Let people know you are interested."

ACTIVITIES

The Survey included a list of twenty types of linkage activities. Respondents were asked to indicate their current and planned activities and provide the name and telephone number of an individual who could provide more detail. The individuals listed were used as the basis for the follow-up interviews. Table 5 lists the percentages of each grade-level of survey respondents participating in the activities, and their planned participation for the next school year. Not all types of linkages are appropriate for all of the grade-levels. Only high schools have cooperative education programs, placement, or apprenticeships.

At the elementary level the most prevalent forms of linkages were: (1) career speakers, 52% of the responding schools, (2) materials donations, 37% of the schools, (3) monetary awards and donations, 31%, and (4) facility tours, 28% of the responding elementary schools. The planned activities indicated at the elementary level represent an anticipated total increase of 16% over the 1993-94 school year.

The middle school respondents also indicated that career speakers were the most often used activity, with 58% of the schools indicating that type of linkage. Materials donations and facility tours were reported activities at 42% of the middle schools, and monetary awards were indicated by 33%. The middle schools also planned on more activities with an 11% increase.

The greatest number of types of linkage activities were reported by the high schools. Facility tours were the most common with 68% of the high schools indicating that activity. Another common form was career speakers with a 64% participation rate. Six different activities were reported by 36% of the high schools: (1) job/career fairs, (2) business/industry mentorships, (3) equipment donations, (4) job shadowing, (5) summer employment for instructors, and (6) cooperative education.

The high schools projected an 18% increase in activities for the next school year.

Overall the schools indicated a 15% increase in the planned use of the various types of linkage activities. During the follow-up interviews almost all of the schools said that there was an increasing trend in linkage activities at their schools, and that they expected it to continue. Only two of the thirty-one educators interviewed expected the level of activity to remain constant.

The responses to this area reveal a limited use of most of the types of linkage activities. Only career speakers (guest speakers who discuss their role in the workplace) and facility tours (field trips) are widely reported among the schools. Many of the schools indicated during the interviews that they had recently started to incorporate business linkages into their programs, but that they intended to actively pursue additional opportunities. The projected activities and reported trends support this point of view.

Since the survey and interviews were accomplished at the building level the data does not represent district level initiatives with the exception of those present at the reporting schools. One of the schools reported that their district, Waukegan Unit 60, had approximately 80 district level partners. Certainly, many districts in Lake County have linkage programs that are having an effect on education. While these partnerships represent important endeavors, the information reported in this study reflects the activities that are taking place in the individual schools in the county.

The following descriptions of individual activities are meant to provide some additional description and demonstrate the local use of the various linkages. It does not represent a comprehensive listing of all activities in the county or among the schools who participated in this study.

Table 5

Current And Planned Linkage Activities (Percent Of Survey Respondents)

Linkage Activities	ELEMENTARY		MIDDLE SCHOOL		HIGH SCHOOL	
	CURRENT ACTIVITY THIS YEAR	PLANNED ACTIVITY NEXT YEAR	CURRENT ACTIVITY THIS YEAR	PLANNED ACTIVITY NEXT YEAR	CURRENT ACTIVITY THIS YEAR	PLANNED ACTIVITY NEXT YEAR
FACILITY TOURS	28	31	42	45	68	68
CAREER SPEAKERS	52	54	58	64	64	68
ADVISORY GROUP	7	9	15	15	27	36
JOB/CAREER FAIRS	11	19	18	33	36	45
EQUIPMENT DONATION	22	26	27	27	36	41
EXTRA-CURRICULAR EQUIPMENT DONATION	4	7	15	15	23	23
MATERIALS DONATION	37	41	42	42	23	23
MONETARY AWARD/DONATION	31	31	33	36	14	14
BUSINESS/INDUSTRY MENTORSHIPS	6	7	-	-	36	41
TUTORING	6	7	9	12	14	14
BUSINESS GRANTS	13	15	-	-	23	27
STATE/FEDERAL GRANTS	22	26	21	21	23	27
JOB SHADOWING	7	9	3	9	36	50
SUMMER EMPLOYMENT (INSTRUCTORS)	-	2	9	9	36	41
INSTRUCTOR INTERNSHIPS	2	2	-	-	9	14
SHARED EQUIPMENT AND FACILITIES	9	13	3	3	14	23
BUSINESS INDUSTRY PARTNERSHIPS	13	13	9	9	23	23
COOPERATIVE EDUCATION	-	-	-	-	36	41
PLACEMENT	-	-	-	-	9	18
APPRENTICESHIP PROGRAMS	-	-	-	-	9	23

Selected School Activities

The following activities represent some of the innovative methods schools and businesses are using to enhance the educational experiences of Lake County youth. While the examples may not be representative of all schools, they do provide positive examples of successful linkages in the county. Of course these examples represent just a few of the schools and businesses involved in linkage activities. Inclusion also does not necessarily imply that the school or business represents a unique participation in the activity or constitute any endorsement on the part of the Lake County Economic Development Commission.

Elementary School Activities. While career speakers are the most prevalent form of elementary school level activities, several other kinds of innovative activities are occurring in Lake County. These range from a celebration called *Sampler* at Andrew Cooke in Waukegan where numerous businesses donate foods that represent the diverse cultures of the student population, to Camp Hyatt, a career awareness experience in the hospitality industry for students at South Park in Deerfield. Both of these schools also participate in the Lake County Business Industry Education Consortium's Space Simulation Project.

Many schools use the Junior Achievement program. One principal described the program, "...they have math, reading, and social studies curriculums, making kids aware of business and how (courses) apply to business. They approached us. A representative came to a staff meeting and had kits that explained the program. It was great." The Junior Achievement program at St. Francis deSales in Lake Zurich involves employees from Kemper National Insurance and included a tour of their facilities. At Raymond Ellis Elementary in Round Lake Beach the volunteers observed classes first to ensure that the business persons related properly to the children at each grade level. Some of their work was supplemented by high school students in the program.

Several schools benefit from partnerships with the Navy at Great Lakes. At Neal Elementary in North Chicago, Navy volunteers serve as classroom aides helping with reading, math, science, social studies, and art. They also assist with lunchroom monitoring. Students from other county schools including East school in Zion participated in a two week Dare to Defy drug awareness summer camp at the base.

Many elementary schools reported donations, like paper at Spaulding in Gurnee and computer software from Baxter Healthcare at East school in Zion. East has also received trees from Browning-Ferris. Many schools also benefit from surplus material donated by companies such as Baxter and Abbott. The Lake County United Way provides a clearinghouse service for such materials. One principal remarked, "Some businesses throw away a lot of stuff that we can use including binders and notebooks. (Donations are) a more efficient use of materials."

At Beulah Park school in Zion students have partnered with the Zion K-Mart. The students were not only the recipients of assistance from the store but also served as helpers, manning booths during an Easter fun fair held at the store. The school also received a garden club grant applied for by a teacher, that resulted in donations from over fifty companies nationwide. Donations included tools, thermometers, rain gauges, flowers, and bird houses.

Several schools participate in the Pizza Hut *Book It* reading incentive program including Neal in North Chicago, Beulah Park in Zion, and Greenwood in Waukegan. Greenwood was also the recipient of an Ameritech technology program grant that links classrooms through computers with other schools around the nation.

Tutors can play an important role with elementary children. Employees from First Midwest Bank in Zion tutored students at East school in Zion, and Navy personnel serve as tutors in several schools.

Parents at Mechanics Grove in Mundelein came to classes during American education week and talked about their jobs and provided lessons including demonstrations in chemistry. About twenty parents K-4 were involved. With the help of several local businesses, parent volunteers constructed an indoor rain forest in one of the school's hallways integrating curriculums from several grades.

Students at Raymond Ellis Elementary worked with Wal-Mart to generate funds for computers through a readathon. A parent of a student at Ellis who works at Felpro provided a linkage for a grant from the company that was used for library equipment and books. Baxter Healthcare provided a facility for a strategic planning weekend. According to the principal the involvement at the school has resulted in increased awareness, "from people who work at Wal-Mart to scientists, they have learned more about what schools are like now."

Students at Beulah Park in Zion visited the Commonwealth Edison Powerhouse energy museum at the Zion nuclear power plant. They also visit some of the local businesses including Pizza Hut, Dairy Queen, McDonalds, and Ray's Fire Extinguishers. Students at Greenwood in Waukegan visited Outboard Marine Corporation to observe computer applications in manufacturing. Neal students also visited the Commonwealth Edison Powerhouse and the News-Sun, while students from Immanuel Lutheran School in Waukegan visited the Motorola Museum in Schaumburg. The principal at Immanuel also attended a program sponsored by Abbott labs called Operation Clean Sweep promoting recycling and the re-use of plastics.

The school newsletter has generated donations of several items at J.J. Pleviak in Lake Villa including a refrigerator, fence, and a wheelchair. Parents have also arranged for donations of art supplies and office furniture through employers. The school also has held a faculty meeting at the Victory Lakes Extended Care Facility to discuss potential linkages.

Clearview Elementary in Waukegan received a $2500 grant from Johnson Controls. The school partners not only with business but also with social service providers, the Lake County YMCA, and the Waukegan Police Department. The principal has attended numerous state level seminars on partnering and visited the Columbus, Ohio school district as part of a district team investigating partnerships.

Middle School Activities. Middle school activities, like the elementary level, also focused on career speakers and facility tours. Innovative middle school programs included a career day based on the program offerings at the Lake County High School's Technology Campus at Thomas Jefferson Middle School in Waukegan, and a shared incentive program in Grayslake involving the Grayslake Middle School and Saint Gilbert parochial school.

The honor card program at Grayslake is an academic incentive program for the students at the two schools. The program was initiated by parents who saw a program like it. It is managed by the office but a parent volunteer does all of the legwork and contacts all of the businesses. More than 20 businesses were involved who provided incentives including free hamburgers and video rentals, and reduced prices on haircare and clothing. A special education teacher at Grayslake has developed multiple linkages with businesses who provide classroom incentives to encourage students.

Several local businesses also provide incentives for students at Big Hollow school. The school and local businesses sponsor an all night slumber/reading party for kids. The school participated in the BIEC space simulation program, and involved personnel from the airlines, a hot air balloon company, and had a helicopter visit from the Northern Illinois Medical Center.

Over 10% of the student population at Grayslake Middle School participated in the annual Take Your Daughter/Children to Work Day. Parents are also regular speakers in social studies classes at the school.

The career day at Thomas Jefferson Middle School was based on the options available at the area vocational center and included twelve individuals from companies including Pennzoil, Haircrafters, Allstate Insurance and Abbott Laboratories. The School also participates in the Private Industry Council's (PIC) program for summer employment. Students who are fourteen or in the 8th grade work for six weeks. They are employed for three hours and attend school for three hours and are paid for all six. Thomas Jefferson also reported receiving assistance from Junior Achievement, as did Saint Anastasia in Waukegan and Saint Gilbert in Grayslake.

Donations have been received by Saint Gilbert through the Abbott recycling program administered by the United Way. The school received tables and chairs for a computer lab out of excess materials. Grayslake Middle School also received glassware and a centrifuge from Abbott.

High School Activities. The high schools represented the widest range of types of linkage activities. These included administrators from Mundelein High School who attended training at the Motorola facility in Libertyville, a top rated student business organization at Warren Township High School, and research mentorships for gifted students at Stevenson High School.

The Science Professors As Resource Knowledge (SPARK) program is designed for accelerated science students at Adlai Stevenson High School in Lincolnshire. The program typically includes eight to fifteen students in an 18 month mentorship at a research facility with a scientist. The students work on a facet of important research. One of the students worked on a trajectory project for the exploration of Pluto. Another student is going to be named in a patent at Motorola. A Stevenson student won 1st place in the state science fair based on his work with his mentor. A number of the students have published in professional journals as active contributors. Companies that have worked with the program include: the Chicago Botanic Gardens, Motorola, Abbott Laboratories, Lutheran General Hospital, Chicago Medical School, Baxter Healthcare, Impell Corporation, MDA Scientific, NutraSweet, and International Minerals and Chemicals.

Job Shadowing was a reported activity at Grayslake High School, Mundelein High School, and Wauconda High School. At Wauconda about 50% of the senior class is involved and between 25 and 30 businesses. The shadowing program at Mundelein includes a senior shadowing day with 60-70 seniors per year. At Grayslake the students complete the shadowing experiences during the Christmas holidays. Participation has included Baxter for three years with students in accounting, and engineering. Condell Hospital and St. Therese Hospital have also supported shadowing with doctors, technicians, and nurses. Scott Hannig, who arranges the activities, shared the following from a letter from a former student who participated in the shadowing experience:

"The experience I had at Baxter during the shadowing program definitely ranks among the top ten high school experiences I've had. I found the program to be challenging, exciting and encouraging. As a result of the time I spent working with (the mentor) my career and educational goals were unmistakably confirmed and my enthusiasm for reaching them was significantly increased."

At Warren Township High School the Future Business Leaders of America (FBLA) chapter is an active source of business involvement. The Warren Township FBLA was awarded the top chapter in Illinois three of the last four, and four of the last six years. The group includes 18-20 business people who are professional members. Parents also participate as professional members. The school has a fall career day with donated doorprizes, and as many as 38 businesses with 300-400 students participate. Between 40-80 students are involved in cooperative education each year at Warren Township.

Lincoln school in Waukegan provides programs that serve special education students in junior high school through age twenty-one. The school had six partners during the 1993-94 school year who provided opportunities for students including supported work activities. Partners included the Lake County Society for Human Development in Zion, McDonald's in Waukegan, and the Private Industry Council of Lake County.

North Chicago High School has been participating in a student mentorship program with a group from Allstate Insurance. The program called TAN (The Allstate Network) originally selected twenty-two students . The mentors had approximately six programs during the first year. During the second year the mentors kept the same group, and worked with them on preparation for their ACT examinations. They also assisted the students with filling out their college entrance papers. The group arranged for several speakers at the high school and have held an open workshop on ACT/SAT preparation.

North Chicago High School and Grayslake High School both reported using the Choices program from Abbott. The program is designed to help students in junior and senior high school learn how to make decisions. Presentations are conducted by employee volunteers, and stress the importance of today's academic decisions to life after high school.

North Chicago High School receives support from community/business-based programs including; Partners in Progress, (an organization started by a former superintendent designed to help students and staff in district 187), Project Succeed (College of Lake County guaranteed two year scholarship incentive program), and the I have a Dream Foundation (a targeted intervention program).

Round Lake High School surveys parents at the beginning of the school year to solicit their assistance. The school has hosted a Chamber of Commerce meeting, and like Grayslake High School, belongs to the Lake County Business Industry Education Consortium. Round Lake has also developed a strong incentive program for attendance with awards from local businesses including savings bonds, gift certificates for restaurants and merchandise, and free tickets to Great America.

Personnel from Wauconda and Grayslake completed summer internships for instructors arranged by the Educational Service Center and VIP Program. A counselor at Grayslake completed a summer experience in which counselors went to several major corporations to find out what they were looking for in employees and to determine the potential opportunities for students.

Mundelein High School was the only site identified within this study that had a designated staff person for partnership development. Toni Rogan, the Community Resource Director, manages the Ventures in Partnerships (VIP) program. The program had 17 business partners in the 1993-94 school year. Motorola (Libertyville) invited ten Mundelein High School administrators to take part in one of their training programs, a two day workshop. They also hosted a finance seminar for students, participated in shadowing and provided a tour. The school has provided computer training for businesses and custom designed software for them. Occasionally business people attend the schools staff development activities. The owner of three local Dominoes pizza stores hosts a field trip to the regional commissary and a local site. The owner also talks to classes about franchising. Manpower provides a $500 scholarship. They also take part in shadowing, career fairs, and have provided training for school staff. Talent Forum and the Venture store in Mundelein sponsored a fashion show and provided training to students in the fashion merchandising program. First of America Bank, and Mundelein Bank personnel spoke to classes about financial aid during a college information night. The Chief Financial Officer and senior Vice President of IMCERA/Pitman-Moore co-taught a Business-Commerce seminar class with a Mundelein High School teacher three days per week for a semester.

ENCOURAGING PARTNERSHIPS

Table 6 indicates the percentage of current and planned promotional activities reported by the survey respondents. Less than 25% of the elementary schools reported using any method to promote linkages. The most often cited (22%) were teacher/parent group initiatives (consistent with the primary method of development) and formally recognizing business involvement. Middle schools had slightly more activity, but still the two most often used, career days and Teacher/parent groups, were reported by less than one-third of the schools. High schools had considerably higher levels of activity with designated staff member the most often used.

All three grade-levels anticipate important increases in promotional activities. The planned increase of promotional activities is 68% at the elementary level. The middle schools reported an anticipated increase of 57%, and the high schools indicated an increase of 39%. This trend is consistent with the lower initial levels of activity at elementary and middle schools compared to high schools. The large increase in promotional activities would appear to also be consistent with a general increase in interest in linkage activities reported at all three grade levels.

Table 6

Current and Planned Promotional Activities (Percent Of Survey Respondents)

	ELEMENTARY		MIDDLE SCHOOL		HIGH SCHOOL	
	CURRENT ACTIVITY	PLANNED ACTIVITY	CURRENT ACTIVITY	PLANNED ACTIVITY	CURRENT ACTIVITY	PLANNED ACTIVITY
OPEN HOUSES FOR BUSINESS REPRESENTATIVES	13	22	6	6	36	50
CAREER DAYS	17	26	30	45	23	45
DESIGNATED STAFF MEMBER RESPONSIBLE FOR LINKAGES	17	28	21	33	59	73
TEACHER/PARENT GROUP COMMITTEE INITIATIVES	22	35	30	42	14	32
PROVIDE TRAINING FOR BUSINESSES	-	2	3	3	9	18
COORDINATE OR ARTICULATE PROGRAMS WITH EMPLOYERS	6	13	6	9	45	55
SHARE SCHOOL FACILITIES AND EQUIPMENT	15	22	12	15	23	32
SOLVE BUSINESS PROBLEMS AS CLASS ACTIVITIES	7	11	12	24	27	36
HAVE A FORMAL LINKAGES STAFF DEVELOPMENT PROGRAM	2	9	-	-	18	32
FORMALLY RECOGNIZE BUSINESS INVOLVEMENT	22	28	3	9	41	50

Lake County Promotional Activities

Several schools in Lake County have activities to promote linkages. These range from district level annual recognition events, newspaper articles that highlight the partnerships, and sharing school athletic facilities with businesses. The most often cited method of recognition was including articles about linkages in school newspapers.

The Waukegan Career Academy held a recognition breakfast for the school's partners. Partners were presented plaques and personalized copies of the yearbook which contained a section on business support.

Mundelein High School appears to have the most developed promotional incentives for partnerships. According to the Mundelein High School representative, "the school puts out an 8000 piece mailing quarterly. We do press releases. We have a community appreciation breakfast, and have a partnership signing breakfast. Every year we have a community appreciation ad in the local newspapers. We take student art work to the partners for them to display. All employees of partners are given a 50% discount on adult-ed offered by the school. (We also) give each partner two free passes to use the pool and unlimited passes to attend athletic events, and concerts at the school. (Partners receive) passes to use the weight room, suspended track, and can use meeting rooms here. They can also borrow equipment like chairs; anything we can do to help."

Although several other schools mentioned promotional activities the primary method appears to be personal contact between the school and business. Most of the educators who were interviewed said that the primary responsibility for developing and promoting these activities was held by the building level administrator.

Staff Development for Linkages

The last section of the survey focused on staff development topics associated with creating linkages. Respondents were asked to indicate current and planned attendance at linkage related staff development opportunities, their willingness to attend regional events, and their capacity to budget for them.

Only one topic was listed by more than half (54%) of the schools as a seminar they would attend: "How to develop a linkage plan." Forty-one percent of the schools said they would attend a seminar on, "Profiles of successful linkages." For both, "Developing partnership contracts," and "Grant writing workshops," 39% indicated interest. Very few schools indicated that they would budget or pay for the linkage staff development activities. The greatest number said they would pay for a grant writing workshop, however, that was only 16% of those who indicated they would attend.

COUNTY LEVEL ASSISTANCE NEEDS

When asked to comment on what assistance they might use from county level groups such as the Regional Superintendent, Economic Development Commission, Business Industry Education Consortium, Lake County Learns, or the College of Lake County, interview subjects responded with the following:

"One of the most important things that they can do is stay in contact with us and offer assistance in terms of speakers, (and) services."

"Concrete information about a program that has been tried and has worked in a certain way providing other districts with that information would be very helpful...not looking to reinvent the wheel, looking for a way to share information, to have that information disseminated from school to school, things that are realistic."

"Increased publicity and awareness of what partnerships really mean. That it's not always schools wanting money, or necessarily wanting time, but sometimes simply wanting ideas and sharing, wanting to get some interchange back and forth. I think there needs to be a lot more awareness on everybody's part on what a partnership really means."

"Pressure at the state level and the board level to make people understand what is needed. Awareness more than anything else, we will never solve the problems without this. We are really following state guidelines. Second priority would be a list of persons willing to come in, resources, etc."

"(If they) would give us some idea of what they are expecting, so we can plan in that direction."

"The next step is determining what we do next, what is our next step? What can we do more, what can business do more?"

"More contacts, a larger variety would be beneficial. Maybe just a list. The time to do it. Provide things that we are not aware of, ideas, what is possible, a name and contact person."

"It is really difficult to attend staff development activities during the day. I am here at least two nights per week for activities. I would prefer staff developments in the summer, first two weeks in August."

"More direction, something more concrete. A possibility of pulling in more businesses. Maybe have businesses come in on the first institute day. Have the teachers or principals come in and talk to them. Need to have business people reinforce schools importance for the kids who are working part time. We need to have everyone tell these kids that school is important. If your getting a D in calculus stay in it! Take the classes that will prepare you; not just increase your GPA."

"Contact the businesses and give us a list of who to talk to. I don't have the time to make the arrangements. Who is available for tours? What is available?"

"Providing manpower for tutoring programs, for after school and extended day facilities. Rather than money, I would rather see the manpower, see people involved in the schools. CLC students could do community service and the high schools kids."

"How can we give you the product that you want in personnel, that can enable students to make a living?"

"Could act as a catalyst to bring more of this together, certain things that work in one area can be expanded. It was like Lake County Learns we all received it but we didn't know exactly what it was, it would have been nice to know what it was, to have a central clearinghouse that you could call."

"Knowing the direction of business and how things are changing so we would know how to prepare the kids."

"Direct certain things, what would be available for the different grade levels? A list of agencies or persons interested."

"Some more clarification on what they want from the schools. I don't have people calling me and saying, 'I want to talk to your classes.' How involved does business want to be?"

"Give our parents jobs so our kids have something to look forward to. If you have a tradition of unemployment in the family, we need bigger changes than just having a speaker come in. We need to have a program where people can be useful human beings."

"Give us some support for linkages, maybe have a social opportunity for these people to meet, provide networking."

"I would be interested in learning more, instead of spinning my wheels, maybe finding some people out there who are willing to do something."

"When they have meetings about partnerships I would like to be invited to learn from each other, that's the main thing."

"Business needs to define what they want. The problems is that all of our test scores, the state IGAPs etc. are based on what we are doing now, it's not based on what business wants and as long as that happens the schools are taking a lot of chances in being able to step forward and say I'm willing to look beyond those IGAPs and teach what students really need to know. It's more than the level of schools, it's the whole state. Businesses need to expand their efforts to the state level and explain what it is that they need and can't just say that kids aren't trained. They have to explain what is needed. Our testing is not geared to what the world of work really wants."

SUCCESSFUL LINKAGES

During the interviews, school personnel were asked to characterize a successful linkage activity. The following responses were collected:

"It starts with a collaborative team, whoever is going to be involved in the activity has to be a part of formulating the activity from the ground up. It cannot be something that's dictated or driven top down, it has to be started at the grassroots level and involve everyone so that each component in the community has a say in it and then they drive the activity, they tell what's going to happen. I think that makes a successful activity. It obviously has to be well planned. It has to have people involved at all stages of the planning, all those who have an interest in its success need to be involved in the planning process. I think that is really it in a nutshell because if you have that, then 90% of the time it will be successful because those people who determine its success will have mapped out the strategy to ensure its success."

"(The linkage) involves students. Directly effects students, and students learn from it, and they are also more aware of (our school), current students, and what the needs of students are."

"Everyone involved and working together as a team."

"The follow up activities. What are you going to do with it?"

"Communication, planning, one-on-one personal relationships, well thought out and planned."

"A win-win."

"The person presenting the materials is able to relate to the children. (It) becomes very difficult if they are not prepared to talk to them or if they try to do one hour with second graders and lose them after fifteen minutes."

"Having the teachers and a business saying 'What can we do together to develop this community?' Ideas are generated; not single directed. It was really exciting to watch our kids give something back, having our kids participate with them, it really gives the kids a sense of what they are doing in school."

"It makes a significant impact on the kids life. I would like not to say, 'what can business give to us, but what can we give to the kids.' Maybe a sense of purpose. (I) like to see kids involved in the workplace."

"Both parties benefit. If you could have seen the looks on the tutors faces when they came in to work with the kids, the kids were hugging them."

"A willingness on the part of the volunteers to come back. If they are unwilling then we have not done something right. Regular support is a sign of a good program."

"Everybody involved has learned something. They are excited and they are talking about it a month later. It was so much fun or so interesting that they are talking about it weeks later."

"One that has been planned well enough that both partners feel comfortable; that both partners feel like the goal has been accomplished, and then to evaluate it and to continue to look at new ways to become involved."

CONTINUING OPPORTUNITIES

The activities included in this report represent important steps toward business and education collaboration in an effort to improve the experiences of our youth. They range from simple one-time donations to complex partnerships developed with long-term commitments. According to the U.S. Department of Education, "There is no single partnership structure nor are there particular goals associated with successful educational partnerships, but there are promising examples."

The National Education Association's handbook for partnering, *Bring Business and Community Resources Into Your Classroom*, lists multiple activities within six general types of resources that schools can incorporate into their partnering plans. The six areas and activities include:

Direct Student Support Activities
- tutoring in subject areas
- mentoring
- guest speakers, lectures, demonstrations
- work study experiences
- technical training (on and off school site)
- skills training classes
- equipment donation (new and used)
- equipment underwritten
- materials donation (new and used)
- materials underwritten
- transportation
- use of facilities
- language instruction (ESL or foreign)
- health and safety (screening and wellness)
- counseling
- technical advice and assistance
- use of media and accompanying guides

Enrichment of Instruction
- field trips/tours
- business and industry visitations
- guest speakers, lectures, demonstrations
- work-study experiences
- career day programs/fairs
- job procurement skills instruction
- technical training
- skills training classes
- mentoring
- career shadowing
- student internships
- employment (job/skill development)
- specialized contests (speech, essay, etc.)
- special assemblies, fairs, events
- school clubs and groups (extracurricular)
- college courses
- counseling services
- "team" teaching or "units" taught by volunteer (math, art, journalism, etc.)
- scholarships
- attendance incentive programs
- reading incentive programs
- display of student projects/art work
- perform at partner events
- citizenship programs
- leadership programs
- materials equipment donated (new/ used)
- materials/equipment sponsored
- printing/mailing
- awards and incentives
- use of facilities
- facilitation of community service projects and involvement

Staff Support and Development
- business and industry visitations
- guest speakers, lectures, demonstrations
- staff internships (paid and unpaid)
- teacher employment
- technical training
- college courses
- staff minigrants/maxigrants
- consultation services
- management training
- workshops
- conferences
- retraining
- staff recognition
- executive on loan
- "team" teaching
- scholarships
- fellowships
- material/equipment donations (new/used)
- materials/equipment underwritten
- use of facilities

Auxiliary Support to School/Staff/ Students

- performance of monitoring and evaluation tasks
- lunchroom, library, playground, classroom assistance
- research studies
- resource centers/banks
- speakers bureau
- antivandalism programs
- drug prevention programs
- citizenship programs
- leadership programs
- volunteer recognition
- use of facilities
- lobbying
- fund raising
- assistance with athletic and cultural events
- judging science and other fairs/projects
- sponsorship of "parent involvement" events
- sponsorship of awards and recognition events
- printing and mailing (school newspapers, notices, publicity)
- equipment/materials donated (new/used)
- equipment/materials underwritten
- writing proposals/developing grants
- serving on educational committees/task forces
- facilitation of community services
- generate good public relations (image) and publicity for school/school district, etc.

Curriculum Development

- equipment/materials donated (new/used)
- equipment/materials sponsored
- guest speakers, lectures, demonstrations, etc.
- consultation services
- research studies
- technical advice and assistance

Site and Equipment Maintenance, Modernization, Beautification

- materials/equipment donated (new/used)
- materials underwritten
- antivandalism programs
- volunteer hours donated
- technical assistance

In *The Fourth R: Workplace Readiness, A Guide to Business-Education Partnerships*, the National Alliance of Business (NAB) provides one structure based on varying levels of commitment and impact. The model is based on six broad levels that represent an increasing commitment generally developed over time as partners gain trust and explore new opportunities. According to the NAB, "The higher the level of involvement and investment in education, the greater the opportunity to bring about lasting improvements in education, and the greater the likelihood of significantly improving the workforce readiness of our nation's youth." During a presentation sponsored by the Lake County Economic Development Commission and Southern Illinois University at Carbondale, in the spring of 1994 Diana Robinson, the regional Vice President of NAB provided the following description of the levels and activities:

Level 1 (low): Partners in Special Services

Such partnerships provide short-term, project- or student-specific activities or resources to help with a specific need. These can be financial and/or staff support, are short-term and are confined to one school, one teacher or one class. Donations and guest speakers fall into this level.

Level 2: Partners in the Classroom

These are often business or university volunteers who improve the learning environment by bringing their expertise to the classroom or bringing the classroom to the business. These are longer-term or recurrent compared to level 1.

Level 3: Partners in Teacher Training Development

Businesses and higher education institutions at this level provide opportunities for teachers and administrators to upgrade their skills and learn more about the labor market and career opportunities. They may help to design long-term professional development programs in conjunction with teachers and administrators.

Level 4: Partners in Management
Management assistance partnerships provide school administrators with support and business expertise in a wide variety of management areas.

Level 5 (high): Partners in Systemic Education Reform
In these partnerships, business, higher education institutions, community groups, and K-12 educators identify ways to improve their education system(s), including the mutual benefits to each participant. They work over the long term in a continuous improvement relationship.

Level 6 (high): Partners in Policy
These are collaborative efforts at the local level in which schools, businesses and elected officials identify issues, shape the public debate, bring about substantive improvements in governance and policy, and affect the overall direction of the educational system over the long term.

In. *A Guide to Developing Educational Partnerships*, published by the U.S. Department of Education, Office of Education Research and Improvement, Naida Tushnet states, "Structures and goals must fit context. Information must be openly shared to ensure they do." In effect each school, business and community must determine the appropriate type, goal, and structure of linkages that will support their goals and needs. The process of developing these activities is an on-going effort relying on trust and communication. Mistakes are bound to occur, Tusnet states, "Every individual, organization, and partnership faces problems and makes mistakes. The way in which these problems and mistakes are dealt with is more important than what they are."

The appendices that follow this report include local, state, and national resources and an annotated bibliography containing multiple handbooks, resource guides, pre-prepared materials, newsletters, and examples of successful activities. These materials are included as a reference for further discussion, planning, implementation, and evaluation of business, community, and school linkages in Lake County. Linkages that provide increasingly critical assistance to schools, inform and involve businesses and communities; motivate students; and support the preparation of the workforce of the future.

APPENDIX A: INTERVIEW PARTICIPANTS

Jerry Bishop, Lake County High Schools Technology Campus, Grayslake

James J. Briscoe, Round Lake Senior High School, Round Lake

Charles Davis, Grayslake Middle School, Grayslake

Jimmy Dew, North Chicago High School, North Chicago

DeAnna Elliott, Andrew Cooke, Waukegan

Dallas C. Evans, Beulah Park Elementary, Zion

Barry L. Fischer, Immanuel Evangelical Lutheran School, Waukegan

Cathy Friar, J.J. Pleviak, Lake Villa

Bernice Gehrls, Clark, Waukegan

Patrick Goodwin, Spaulding School, Gurnee

Denise Nielsen-Hall, South Park, Deerfield

Scott Hannig, Grayslake High School, Grayslake

Michael A. Hauser, Roundout School, Lake Forest

Katrina D. Heden
Big Hollow Middle, Ingleside

Victoria Helander-Heiser
Stevenson High School, Lincolnshire

Lucille Johnson, Neal Elementary
North Chicago

Julie Kasper, Lincoln School, Waukegan

Kathleen A. Kuhr, Mechanics Grove, Mundelein

Judith Lafferty, Greenwood, Waukegan

Roger E. Lemnus, Shiloh Park, Zion

James Menzer, Raymond Ellis Elementary, Round Lake Beach

Mary Michaud, Saint Anastasia, Waukegan

Allan Mismash, Jefferson Middle School, Waukegan

Thomas O'Rourke, Clearview, Waukegan

Chuck Ramsey, Joe Stephenitch
Warren Township High School, Gurnee

Roy Rash, Saint Francis deSales School, Lake Zurich

John C. Rayburn, Wauconda High School, Wauconda

Toni Rogan, Mundelein High School
Mundelein

Elaine Skrzypcznski, Saint Gilbert, Grayslake

Bryan Wright, Waukegan Career Academy, Waukegan

Gerald E. Zoephel, East School, Zion

APPENDIX B: RESOURCES

This listing is only a partial sample of the local, state, and national resources dedicated to assisting with partnership activities. Resources are listed for information purposes only, listings do not constitute official endorsement by the Lake County Economic Development Commission.

American Association for the Advancement of Science
1333 H Street, NW
Washington, DC 20005
202/326-6670

Association of School/Business Partnership Directors
P.O. Box 923
Norwalk, CT 06852

Boy Scouts of America Explorer Programs and Career Awareness
Katherine M. Helmle, District Executive
Northeast Illinois Council
2745 Skokie Valley Road
Highland Park, IL 60035
708/433-1813
Fax 708/433-2036

Careers for Youth
John P. Gnaedinger, Chairman
1415 Lake Cook Road
Deerfield, IL 60015
708/267-8033

Chambers of Commerce

Antioch Chamber of Commerce
708/395-2233

Barrington Area Chamber of Commerce
708/381-2525

Deerfield Chamber of Commerce
708/945-4660

Fox Lake Chamber of Commerce
708/587-7474

Grayslake Chamber of Commerce
708/223-6888

Greater Lincolnshire Chamber of Commerce
708/295-3111

Highwood Chamber of Commerce
708/433-2100

Highland Park Chamber of Commerce
708/432-0284

Lake Bluff Chamber of Commerce
708/295-8228

Lake County Chamber of Commerce
708/249-3800

Lake Forest Chamber of Commerce
708/234-4282

Lake Zurich Chamber of Commerce
708/438-5572

Libertyville/Mundelein/Vernon Hills LMV Chamber of Commerce
708/680-0750

Lindenhurst Chamber of Commerce
708/356-2272

North Chicago Chamber of Commerce
708/689-3222

Round Lake Area Chamber of Commerce
708/546-2002

Wauconda Chamber of Commerce
708/526-5580

Zion Chamber of Commerce
708/872-5405

College of Lake County
Talman C. "Tim" Budd II
Associate Dean for Economic Development
19351 W. Washington St.
Grayslake, IL 60030
708/223-3615

Girl Scouts, Illinois Crossroads Council
21555 W. Gelden Road
Lake Villa, IL
708/265-1752

Illinois Council on Vocational Education
100 Alzina Building
100 North First Street
Springfield, IL 62702-5186
217/782-2892

Illinois State Board of Education Department of Adult, Vocational and Technical Education, Job Training Section
Dr. Bradley A. Woodruff, Manager
100 North First Street, E-432
Springfield, IL 62777
217/782-4862
Fax 217/782-9224

James R. Thompson Center
100 West Randolph- CH 14-300
Chicago, IL 60601
312/814-2708

Illinois State Council on Business-Education Partnerships
Illinois State Board of Education
Terry L. Epley,
Assistant to the Executive Deputy Superintendent
100 North First Street
Springfield, IL 62777-001
217/782-0342
Fax 217/782-0679

Junior Achievement of Chicago
Peter E. Truschke, Operations Manager
651 W. Washington, Suite 404
Chicago, IL 60661-2193
312/715-1300, Ext. 247
Fax 312/715-0694

Lake County Business Industry Education Consortium
Jerry Gudauskas, Executive Director
19525 W. Washington Street
Grayslake, IL 60030-1194
708/223-6681

Lake County Economic Development Commission
Harry Pettengill, Chairman
18 North County Street, Suite A-803
Waukegan, IL 60085
708/360-6350

Lake County High Schools Technology Campus (Formerly Lake County Area Vocational Center)
19525 Washington Street
Grayslake, IL 60030
Linda L. Helton, Director
708/223-6681
Fax 708-223-7363

Lake County Learns
Sally Foster
2020 O'Plaine Road
Green Oaks, IL 60048
708/816-0063
FAX 816-0093

Lake County Skills Development Center, CHOICES Program
William Pepito, Manager
Abbott Laboratories
Department 39J, Building J30
100 Abbott Park Road
Abbott Park, IL 60064-3500
708/937-4227

National Alliance of Business
1201 New York Avenue, N.W.
Suite 700
Washington, DC 20005
202/289-2888

Diana Robinson
Regional Vice President
National Alliance of Business
11 East Adams, Suite 1008
Chicago, IL 60603
312/341-9766

National Association of Partners in Education, Inc.
209 Madison Street, Suite 401
Alexandria, VA 22314
703/836-4880
Fax 703/836-6941

President of Illinois State Affiliate:
Barbara S. Banker, Community Services Director
Woodstock School District 200
501 West South Street
Woodstock, IL 60098
815/338-8200

National Association of Industry-Education Cooperation
716/834-7047

National Education Association Education, Business and Outreach
1201 16th Street, N.W.
Washington, D.C. 20036
202/822-7015
Sylvia Seidel
Assistant Director for National Center for Innovation
202/822-7906

Private Industry Council of Lake County
Christine Stevens, Director
415 Washington Street
Waukegan, IL 60085
708/249-2200

Regional Superintendent of Schools
Edward J. Gonwa, Superintendent
18 North County, A904
Waukegan, IL 60085-4362
708/360-6313
Fax 708/360-8180

United Way of Lake County
Elizabeth Jan Edgar, President
2020 O'Plaine Road
Green Oaks, IL 60048
708/816-0063

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Susan Gruskin, Coordinator
555 New Jersey Avenue NW
Washington, DC 20208-5644
202/219-2116
FAX 202/219-2106

ERIC Clearinghouse on Adult, Career, and Vocational Education
1900 Kenny Road
Columbus, OH 43210-1090
800/848-4815

AskERIC
askeric@ericir.syr.edu
Provides teachers and parents nationwide with answers to questions via the internet and other online services. Questions by e-mail will be answered within 48 hours by experts in the field. Collections of research results and lesson plans for classroom use are also available through the AskERIC Gopher at **ericir.syr.edu.**

U.S. Department of Labor
Employment and Training Administration
U.S. Department of Labor
Washington DC 20210

Bureau of Apprenticeship and Training
2350 East Devon Ave.
Suite 300
Des Plaines, IL 60018
708/827-7139

APPENDIX C: BIBLIOGRAPHY (Books Periodicals and Materials)

(Prices listed are as of 10/94 and are subject to change. Listings are for reference only and do not constitute official endorsement by the Lake County Economic Development Commission).

Illinois Council on Vocational Education
100 Alzina Building
100 North First Street
Springfield, IL 62702-5186
217/782-2892

Building Public-Private Partnerships to Improve Vocational Education in Illinois. (Free, subject to availability). Center for Governmental Studies, Northern Illinois University, DeKalb, IL. Illinois Council on Vocational Education

How Business and Labor Can Help Education Prepare a World-Class Workforce (Free, subject to availability). Results from survey of 1200 businesses and 26 labor organizations. Brochure summarizes ways in which business and labor can contribute to the design and delivery of effective educational programs.

Working with Business and Labor to Maximize the Partnership Potential: Tips for Educators (Free, subject to availability). Brochure based on survey responses and roundtable discussions.

Illinois State Council on Business-Education Partnerships
Illinois State Board of Education
Terry L. Epley
Assistant to the Executive Deputy Superintendent
100 North First Street
Springfield, IL 62777-001
217/782-0342
FAX 217/782-0679

Partners in Action: Keeping Pace with the Future, January 11-12, 1995. The annual statewide conference on business-education partnerships.

Business-Education Partnerships in Illinois (Free, subject to availability). The Illinois State Board of Education publishes an annual directory of partnerships gathered from the applications submitted in response to the Illinois State Council on Business Education Partnership's recognition program. The second volume (1993) describes 100 partnerships operating across the state.

InfoMedia Inc.
P.O. Box 210
Ellenton, Florida 34222-0210
813/776-2535
Charges include Shipping and Handling

The National Conference on Education Reform, Held each fall, features national experts from business and education detailing programs that provide "workable solutions" in education reform.

Partnerships in Education Journal. Published 12 times per year, one year subscription $43.00. Focuses on various linkages between the private and public sectors, and schools, colleges and universities. Each article contains full contact information so that readers may network directly with program managers.

Directory 94, The National Directory of Partnership Programs and Practitioners - 7th Edition ($38.50). The seventh edition of the nation's original directory of partnership programs and practitioners.

2-Book Set: **Partnerships in Education: Measuring Their Success** and **How to Monitor & Evaluate Partnerships in Education**, by Dr. Susan Otterbourg & edited by Don Adams ($57.50). First book focuses on the measurement and evaluation of partnership programs, the second offers readers a look at empirical research as it applies to measuring and evaluating partnerships.

Business-Education Report, 1 year subscription 12X per year ($175.00). Targets the total involvement of business in education nationwide. Written for the corporate representative who directs or manages education programs for his or her corporation.

PIE Journal's 100 Best Programs for 1994-95 ($28.50). Showcases the 100 best school-business-college-university partnerships operating in the U.S. Programs are classified in more than 20 subject categories.

Profiles in Action: Bridges from School to Work ($28.50). Details about 11 exemplary school-to-work programs. A two-part resource section lists organizations involved in this work and printed materials targeting school-to-work issues.

Profiles in Action: Parental Involvement ($28.50). Descriptions of exemplary programs that focus on the involvement of parents, family members or guardians in the educational process. Includes resources and contacts.

National Alliance of Business
11 East Adams
Suite 1008
Chicago, IL 60603
312/341-9766

(Call for complete catalog of books, periodicals and video tapes, and to determine shipping and handling charges).

The Cutting Edge of Common Sense: Total Quality, Education and Systemic Change (Free). The concept of total quality management applied to education.

Recrafting the Business of Schooling: Shared Lessons from Implementing School-Based Management (Free). Learn how a decentralized company, JC Penny, helped make a difference in the Ft. Worth Independent School District.

Our Children's Education Series (Free) 5 brochures, this series informs, assists and involves parents teachers, and school management. Camera-ready art is available to employers with permission to reprint with company's logo and Chairman's message. Series includes: **Our Children's Education: What Parents Can Do**, **Our Children's Education: Outside the Classroom**, **Our Children's Education: Supporting Teachers and Principals**, **Our Children's Education: From School to Work**, and **Our Children's Education: School Management and Accountability**.

The Business Roundtable Participation Guide: A Primer for Business on Education (Free). Expertly researched discussion of the complex issues in education that need business' attention.

America's Leaders Speak Out on Business/Education Partnerships ($14.00). Summary of the Compact Institute/Business Leadership Forum. Practical discussion and real life examples to strengthen understanding of business/education partnerships.

Bridge to Tomorrow: Building A Quality Workforce Video ($49.00). Featured are business, labor, government, and education leaders' perspectives on facing the challenges of the classroom and the changing workforce.

The Compact Project: School Business Partnerships for Improving Education ($14.00). Learn the early lessons of 12 urban communities that developed business/education partnerships.

The Fourth R: Workplace Readiness - A Guide to Business-Education Partnerships ($9.95). This guide presents pertinent information for the creation of school/business partnerships at all levels of involvement, from tutoring to policy implementation.

The Fourth R: Workplace Readiness Video ($35.00). Designed to inform and motivate business to become more involved with education, this video covers the reasons why involvement is so important, along with several examples of successful partnerships.

National Association of Partners in Education, Inc.
209 Madison Street, Suite 401
Alexandria, Virginia 22314
703/836-4880
Fax 703/836-4880
Materials require additional shipping and handling charges.

50 Important Things You Can Do To Improve Education (Free, Pay Shipping and Handling Only). Provides practical guides to implement and replicate 50 model business/education partnerships.

Business & Education: A Practical Guide to Creating and Managing a Business/Education Partnership ($50.00). Guide to creating strong business/education partnerships using NAPE's 12 step process for program development.

Handbook for Principals and Teachers: A Collaborative Approach for Effective Involvement of Volunteers ($20.00). Know how to involve volunteers creatively and effectively, includes essential strategies for successful community involvement.

Long-Range Strategic Planning for School Volunteer and Partnership Programs ($15.00). The process in this manual is written for a two-day setting with 30 participants. Steps allow stakeholders to define, discuss and reach consensus about the organizations future and how to get there.

Partnership Evaluation: Simple to Comprehensive ($30.00). Topics include evaluation steps, design and planning, methods and strategies, program monitoring, economic efficiency, and barriers to partnership development and evaluation. Sample forms included.

How to Organize and Mange School Volunteer Programs ($50.00). A concise, self-instruction guide designed to help initiate and maintain organized school volunteer programs.

Partnership Assessment: Criteria, Standards & Indicators ($40.00). Guides users in preparing and implementing an effective assessment process.

Mentors: Making a Difference in Our Public Schools ($9.95). Chronicles several individuals committed to making a difference in schools. Includes a resource guide complete with addresses and phone numbers of organizations plus information on sources of funding.

Creating and Managing Partnerships for Service-Learning Integration: A Guide For Service-Learning Coordinators ($35.00). Information and guidance to develop and implement quality partnerships. Identify key players and how to recruit their involvement for integrating service into school curricula.

Finish for the Future: America's Communities Respond ($15.00). The result of a two-year study conducted by NAPE and a national advisory committee representing public and private sectors. Focused on school dropout prevention partnerships, includes an overview and 78 detailed descriptions of exemplary models.

Intergenerational Partnerships ($50.00). Learn how to involve senior citizens to work directly with students, and to assist teachers, administrators and other school staff.

Organizing Effective School-Based Mentoring Programs ($35.00). Manual supports development of a mentor program that supports mentors as they work one-on-one with students.

Involving Youth in the Community ($20.00). Outlines process to plan and implement youth community service projects.

Creating and Managing School/Community Partnerships ($50.00). A training manual for community teams and program managers. Complete with worksheets and sample materials.

Creating Successful Rural School/Community/Business Partnerships: Enhancement of Education for Special Needs Students ($15.00). Partnership directors in rural communities who want to create effective partnerships and are at the initial stages of program development can use models from this book.

Grantseeking: How to Find a Funder and Write a Winning Proposal ($15.00). The entire grantseeking process from generating a good idea, through identifying the right grantmaker, writing a winning proposal, and administering the grant.

Partnerships in Education: Measuring Their Success ($33.00). Learn how to choose program activities to achieve specific objectives, plan, organize and implement monitoring and evaluation. How to use selected strategies and evaluation instruments.

A Practical Guide to Creating and Managing Community Coalitions for Drug Abuse Prevention ($9.00) Guides communities to pool resources for drug abuse prevention efforts.

School Volunteer Programs: Everything You Need to Know to Start or Improve Your Program ($4.50). Strategies for recruiting, orienting, training, working with and maintaining the moral of volunteers, as well as evaluating your program.

Tips for Tutoring ($8.00). Techniques proven successful with children from kindergarten to high school.

Scientists in the Classroom ($10.00). Developed to assist educators to identify, recruit and place mathematicians and scientists as school volunteers.

Partnership Survey Results ($6.00 Statistical Report, $9.00 Presentation Summary). Based on 1989-90 school year.

Teens as Volunteer Tutors ($15.00). Step-by-step guide helps design and implement a service-learning project in which teens assume a leadership role as tutors to elementary school student. Training guidelines and materials for project leaders and teen tutors are included.

Training Library Videos - How to Organize and Manage Business/Education Partnerships ($350.00 can be previewed for $20.00). Two tapes total time 3 hours.

National Education Association
Education, Business and Outreach
1201 16th Street, N.W.
Washington, D.C. 20036
Sylvia Seidel
Assistant Director for National Center for Innovation
202/822-7906

Bring Business and Community Resources Into Your Classroom: A Handbook for Educators From the National Education Association (Free Upon Request). Includes sample forms, letters, planning materials.

The Private Industry Council of Lake County
415 Washington Street
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Human Services for Lake County People (Call for pricing and availability). The Redbook, is a comprehensive directory and referral guide for services within the Lake County area.

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Synthesis of Existing Knowledge and Practice in the Field of Educational Partnerships (Free from OERI; PIP 93-1102). Discusses the history, context, and types of educational partnerships; gives examples of partnerships from simple to complex; and points out ways of evaluating partnership programs.

Project Abstracts (Free from OERI; PIP 93-1117) Describes the 30 funded projects, the legislation and history, and the evaluation project.

Mentoring (Free from OERI, #OR 93-3059). Describes what it is, why mentoring programs are so popular, how they work and why they are needed, and gives some examples of mentoring programs.

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A Guide to Developing Educational Partnerships ($4.25, refer to #065-000-00619-7). Offers practical steps to help anyone who wishes to start a partnership and avoid as many frustrations as possible.